CLAIMS

1. A method of operating a data communications interface connected between a first data terminal and a digital radio frequency communications link connectable to a second data terminal; comprising:

receiving from the digital communications link a connection control signal which sets the parameters to be used for data communication between the first and second terminals; and

sending data received from the data terminal to the digital communications link in response to receipt of said connection control signal.

2. A method of operating a data communications interface connected between a second data terminal and a digital radio frequency communications link connectable to a first data terminal; comprising:

(a) sending to the digital communications link a connection control signal which sets the parameters to be used for data communications between the first and second data terminals; and

(b) sending data received from the second data terminal to the digital communications link in response to the completion of step (a).

3. A method as claimed in claim 2, comprising:

repeating steps (a) and (b) until a confirmation signal, which indicates receipt of the connection control signal by remote equipment, is received from the digital communications link.

4. A method as claimed in any preceding claim, wherein the data communications interface is operable in HDLC asynchronous balanced mode for communication over the digital communications link.

5. A method of operating a data communications between a data terminal and a digital radio frequency communications link, comprising:

transmitting a signal to the digital communications link in a format comprising one or more frames each of a constant frame length, each said frame including a plurality of subframes each of a constant subframe length and including variable length information indicative of the length of valid information in that subframe.

6. A method of operating a data communications interface between a first data terminal and a digital radio frequency communications link for connection to a second data terminal, comprising:

receiving a signal from the digital communications link in a format comprising one or more frames, each of a constant frame length, each said frame including a plurality of subframes each of a constant subframe length and including variable length information indicative of the length of valid information in that subframe, wherein one of said subframes includes a plurality of data sent by said second data terminal, and

sending the first of said data received to the first data terminal before the last of said data is received from the digital communications link.

7. A method of operating a communications interface connected between a telephone network and a digital communications link, comprising:

receiving a call progress signal from the telephone network and sending call progress information over the digital communications link in responses thereto, wherein said call progress information includes information relating to the frequency of said call progress signal.

8. A method as claimed in claim 7, wherein the call progress information includes information relating to the modulation of said call progress signal.

9. A method of operating a communications interface between a telephone network and a digital communications link, comprising:

receiving a call progress signal from the telephone network, selecting one of a predetermined set of call progress codes according to the type of the call progress signal and sending the selected call progress code over the digital communications link.

10. A method as claimed in claim 9, wherein said set of codes correspond to a ringing, busy and an unobtainable type of call progress signal respectively.

11. A method of operating a data communications interface between a data terminal and a digital radio frequency communications link, said interface having a buffer for storing data for transmission from the data terminal to the digital communications link, comprising:

receiving an interrupt indication from the data terminal; and

clearing said buffer and sending an interrupt signal to the digital communications link in response to the receipt of the interrupt indication.

12. A method of operating a data communications interface between a data terminal and a digital radio frequency communications link, said interface having a buffer for storing data received from the digital communications link for sending to the data terminal, comprising:

receiving an interrupt signal from the digital communications link; and

clearing said buffer and sending an interrupt indication to the data terminal in response to receipt of the interrupt signal.

13. A method as claimed in any preceding claim, wherein said digital communications link comprises a satellite link.

14. Data communications interface apparatus for connection between a first data terminal and a digital radio frequency communications link connectable to a second data terminal, comprising:

means for receiving data from the first data terminal;

means for detecting receipt from the digital communications link of a connection control signal for setting the parameters to be used for data communication between the first and second data terminals; and

means for sending said received data to the digital communications link in response to the detection of said connection control signal.

15. Data communications interface apparatus for connection between a second data terminal and a digital radio frequency communications link for communication with a first data terminal, comprising:

means for sending to the digital communication s link a connection control signal for setting the parameters to be used for data communications between the first and second data terminals;

means for receiving data from the second data terminal; and

means arranged to send said received data to the digital communications link in response to the sending of the connection control signal.

16. Apparatus as claimed in claim 14 or 15, further comprising means for detecting receipt of a confirmation signal from the digital communications link, wherein said means for sending the connection control signal is arranged to repeat the sending of the connection control signal, and the means arranged to send the received data is arranged to repeat the sending of the received data, until receipt of said confirmation signal is detected, said confirmation signal being indicative of receipt of the connection control signal by remote apparatus connected to the digital communications link.

17. Apparatus as claimed in any one of claims 14 to 16, including an interface operable in HDLC asynchronous balanced mode for communication over the digital communications link.

18. Data communications interface apparatus for connection between a data terminal and a digital radio frequency communications link, comprising:

means arranged to send information to the digital communications link in a format comprising:

one or more frames each of a constant frame length, each said frame including a plurality of subframes each of a constant subframe length and including variable length information indicative of the length of valid information in that subframe.

19. Data communications interface apparatus for connection between a first data terminal and a digital radio frequency communications link connectable to a second data terminal, comprising:

means for receiving a signal from the digital communications link in a format comprising:

one or more frames, each of a constant frame length, each said frame including a plurality of subframes each of a constant subframe length and including variable length information indicative of the length of valid information in that subframe, wherein one of said subframes includes a plurality of data sent by said second data terminal, and

means arranged to send the first of said data to the first data terminal before the last of said data is received from the digital communications link.

20. Communications interface apparatus for connection between a telephone network and a digital communications link, comprising:

means for receiving a call progress signal from the telephone network and means responsive to said receipt to send call progress information over the digital communications link, wherein said call progress information includes information relating to the frequency of said call progress signal.

21. Apparatus as claimed in claim 20, wherein the call progress information includes information relating to the modulation of said call progress signal.

22. Communications interface apparatus for connection between a telephone network and a digital communications link, comprising:

means for receiving a call progress signal from the telephone network and means responsive to said receipt to select one of a predetermined set of codes according to the type of said call progress signal and to send said selected call progress code over the digital communications link.

23. Apparatus as claimed in claim 22, wherein said predetermined set of codes corresponds to ringing, busy and unobtainable call progress signals respectively.

24. Data communications interface apparatus for connection between a data terminal and a digital radio frequency communications link, comprising a buffer for storing data for transmission from the data terminal to the digital communications link,

means for detecting an interrupt indication from the data terminal;

means arranged to clear said buffer in response to said detection; and

means arranged to send an interrupt indication to the digital communications link in response to said detection.

25. Data communications interface apparatus for connection between a data terminal and a digital radio frequency communications link, comprising a buffer for storing data transmission from the digital communication link to the data terminal;

means for detecting an interrupt indication from the digital communications link;

means arranged to clear said buffer in response to said detection; and

means arranged to send an interrupt signal to the data terminal in response to said detection.

26. A satellite earth station including apparatus as claimed in any one of claims 14 to 25.

27. Data terminal equipment including apparatus as claimed in any one of claims 14 to 25.

28. A communication system including apparatus as claimed in any one of claims 14 to 25.